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PATENT
671308-2001.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Minoru FUJIMORI et al

Serial No. : 10/782,899

For : ANAEROBIC BACTERIUM AS A DRUG FOR CANCER
GENE THERAPY

Filing Date : February 23, 2004

Examiner : Brian A. Whiteman

Group Art Unit : 1632

New York, NY 10151

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 16, 2005.

Deborah L. Lu, Reg. No. 50,940

(Name of Applicant, Assignee or Registered Representative)

Signature

June 16, 2005

Date of Signature

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner's attention is respectfully directed to the documents which are set forth on the accompanying form PTO-1449. Each document on the form PTO-1449 marked with an "*" was forwarded to, or cited by, the Examiner in the parent application, namely US application Serial No. 09/816,391, filed March 26, 2001. Therefore, copies of such documents can be found in the parent application file. Hence, no additional copy of such documents are being forwarded herewith. The form PTO-1449 also includes two documents not marked with an "*", namely

Japanese patent application No. 9811517, filed September 30, 1998 (abstract) and Els Kievit et al., Cancer Research 59 1417-1421, April 1, 1999, copies of which are forwarded herewith.

The Information Disclosure Statement submitted herewith is being filed before the mailing date of a first Office Action on the merits. Accordingly, it is believed that no fee is required. However, the Commissioner is authorized to charge any additional fee, or to credit any overpayment in fees, to Deposit Account No. 50-0320.


The filing of this Information Disclosure Statement is not an admission that the documents identified herein constitute prior art to the present application.

Consideration of this Information Disclosure Statement is respectfully requested. Applicants respectfully request that a copy of Form PTO-1449 be initialed by the Examiner and returned to the undersigned.

As this Information Disclosure Statement is being submitted before receipt of an Office Action, it is believed that no fee is required. If, however a fee is due, the Director is authorized to charge any additionally required fee, or credit any overpayment, to deposit account 50-0320.

Respectfully submitted,

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Based on Form PTO-1449 (3/90)				ATTY. DOCKET NO. 671308-2001.1		SERIAL NO. 10/782,899	
REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Minoru FUJIMORI et al.			
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JUN 20 2005
 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	AA	* 6,416,754	7/2002	Brown et al.			
	AB	* 2002/018229	12/2002	Brown et al.			
	AC	* 2003/0103952	6/2003	Brown et al.			
	AD	* 4,486,407	2/1983	Taguchi	424	85	
	AE	* 2002/0006432	7/2001	Collins et al.	424	439	
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
						YES	NO	
	AL	98111517	09/30/98	JAPAN			Abstract	
	AM	* WO 96/11277	10/1995	WIPO				
	AN							
	AO							
	AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER INITIAL	AQ		Els Kievit et al.: "Superiority of Yeast over Bacterial Cytosine Deaminase for Enzyme/Prodrug Gene Therapy in Colon Cancer Xenografts," (Cancer Research 59 1417-1421, April 1, 1999)
	AR		* K. Low et al., "Lipid A mutant <i>Salmonella</i> with suppressed virulence and TNF α induction retain tumor-targeting <i>in vivo</i> ", Nature Biotechnology, Vol. 17, Jan 1999, pp.37-41.
	AS		* G. Dachs et al., "Targeting gene expression to hypoxic tumor cells", Nature Medicine, Vol. 3, No. 5, May 1997, pp. 515-520.
	AT		* H. Matsumura et al., "Construction of <i>Escherichia coli-Bifidobacterium longum</i> shuttle vector transforming <i>B. longum</i> 105-A and 108-A", Biosci. Biotech. Biochem., Vol. 61, No. 7, 1997, pp. 1211-1212.
	AU		* A. Argnani et al., "A convenient and reproducible method to genetically transform bacteria of the genus <i>Bifidobacterium</i> ", Microbiology, Vol. 142, 1996, pp.109-114.

EXAMINER	DATE CONSIDERED
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-1449 (3/90)			ATTY. DOCKET NO. 671308-2001.1		SERIAL NO. 10/782,899	
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
	AV		* N. Kimura et al., "Selective localization and growth of <i>Bifidobacterium bifidum</i> in mouse tumors following intravenous administration", Cancer Research, Vol. 40, June 1980, pp. 2061-2068.			
	AW		* M. Fox et al., "Anaerobic bacteria as a delivery system for cancer gene therapy: <i>in vitro</i> activation of 5-fluorocytosine by genetically engineered clostridia", Gene Therapy, Vol. 3, 1996, pp. 173-178.			
	AX		* MJ Lemmon et al., "Anaerobic bacteria as a gene delivery system that is controlled by the tumor microenvironment", Gene Therapy, Vol. 4, 1997, pp. 791-796.			
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	AZ		* Proceedings, Fifty-Ninth Annual Meeting of the Japanese Cancer Association, October 4-6, 2000, Yokohama, Vol. 91 Supplement, No. 1880 as well as its English translation and Verification of translation.			
	BA		* Yazawa et al., Cancer Gene Therapy, Vol. 7, pp. 269-274 published on March 27, 2000 as well as a copy of the certificate.			
	BB		* C. Tacket et al., "Comparison of the Safety and Immunogenicity of Δ aroC Δ aroD and Δ cya Δ crp <i>Salmonella typhi</i> Strains in Adult Volunteers," Infection and Immunity, Vol. 60, No. 2, pp. 536-541, Feb. 1992.			
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	BD		* D. Saltzman et al., "Attenuated <i>Salmonella typhimurium</i> Containing Interleukin-2 Decreases MC-38 Hepatic Metastases: A Novel Anti-tumor Agent", Cancer Biotherapy and Radiopharmaceuticals, Vol. 11, No. 2, pp. 145-153, 1996.			
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	BF		* B. Reddy et al., "Inhibitory Effect of <i>Bifidobacterium longum</i> on Colon, Mannary, and Liver Carcinogenesis Induced by 2-Amino-3-methylimidazo[4,5-f]quinoline, a Fodd Mutagen", Cancer Research, Vol. 53, pp. 3914-3919, Sep 1, 1993.			
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	BH		* M. Babincova et al., Life and Medical Sciences Online, (2000), 1, pp. 1-4.			
	BI		* IM Verma et al., Nature, "Gene therapy-promises, problems and prospects," Sep. 1997, Vol. 389, pp. 239-242.			
	BJ		* WF Anderson, Nature, "Human gene therapy," Apr. 1998, Vol. 392, pp. 25-30.			
	BK		* K Yazawa et al., Breast Cancer Research and Treatment, " <i>Bifidobacterium longum</i> as a delivery system for gene therapy of chemically induced rat mammary tumors," 2001, 66, pp. 165-170.			
	BL					
	BM					
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